

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A method of removing polymer adhered to a sidewall of an etched metal layer formed on a substrate, comprising:

(a) dissolving said polymer by providing chemicals onto a surface of said substrate; and

(b) rinsing said chemicals out of said substrate by providing pure water onto a surface of said substrate,

wherein at least a part of said step (a) is carried out in an oxidation atmosphere that is created by supplying pure oxygen to said substrate.

2. (original) The method as set forth in claim 1, wherein said steps (a) and (b) are carried out in oxidation atmosphere.

3. (original) The method as set forth in claim 1, wherein said step (a) is carried out in oxidation atmosphere from the beginning or middle thereof till said step (b) starts.

4. (original) The method as set forth in claim 1, wherein said oxidation atmosphere is established after said polymer is dissolved by said chemicals until said sidewall appears.

5. (original) The method as set forth in claim 1, further comprising the step of (c) rotating said substrate to splash said chemicals out of said substrate by virtue of centrifugal force, said step (c) being carried out between said steps (a) and (b).

6. (original) The method as set forth in claim 5, wherein said step (c) is carried out in oxidation atmosphere.

7. (original) The method as set forth in claim 1, further comprising the step (d) of drying said substrate, said step (d) being carried out after said step (b).

8. (original) The method as set forth in claim 1, wherein said step (a) is carried out in inert atmosphere except while said step (a) is carried out in oxidation atmosphere.

9. (original) The method as set forth in claim 1, wherein said steps (a) and (b) are repeatedly carried out.

10. (original) The method as set forth in claim 1, wherein said metal layer is an aluminum layer.

11. (original) The method as set forth in claim 10, wherein said aluminum layer contains copper.

12. (original) The method as set forth in claim 1, wherein a barrier layer is formed on said metal layer.

13. (original) The method as set forth in claim 1, wherein said chemicals is ammonium fluoride.

14-34. (canceled)

35. (new) A method of removing polymer adhered to a sidewall of an etched metal layer formed on a substrate, comprising:

placing the substrate in a closed space;

then dissolving said polymer by providing chemicals onto a surface of said substrate; and

then rinsing said chemicals out of said substrate by providing pure water onto a surface of said substrate,

wherein at least a part of said dissolving said polymer step is carried out while supplying oxygen to the closed space.

36. (new) The method as set forth in claim 35, wherein said steps of dissolving said polymer and rinsing said chemicals are carried out while supplying oxygen to the closed space.

37. (new) The method as set forth in claim 35, further comprising the step of rotating said substrate to splash said chemicals out of said substrate by virtue of centrifugal force, said step of rotating said substrate being carried out between said steps of dissolving said polymer and rinsing said chemicals.

38. (new) The method as set forth in claim 37, wherein said step of rotating said substrate is carried out while supplying oxygen to said closed space.

39. (new) The method as set forth in claim 35, further comprising the step of drying said substrate, said step of drying said substrate being carried out after said step of rinsing said chemicals.

40. (new) The method as set forth in claim 35, wherein said step of dissolving said polymer is carried out in an inert atmosphere except when oxygen is being supplied during said step of dissolving said polymer.

41. (new) The method as set forth in claim 35, wherein said steps of dissolving said polymer and rinsing said chemicals are repeatedly carried out.

42. (new) The method as set forth in claim 35, wherein said metal layer is an aluminum layer.

43. (new) The method as set forth in claim 42, wherein said aluminum layer contains copper.

44. (new) The method as set forth in claim 35, wherein a barrier layer is formed on said metal layer.

45. (new) The method as set forth in claim 35, wherein said chemicals is ammonium fluoride.

46. (new) A method of removing polymer adhered to a sidewall of an etched metal layer formed on a substrate, comprising:

placing the substrate in a closed space;

then supplying an inert gas to said closed space;

then dissolving said polymer by providing chemicals onto a surface of said substrate; and

then rinsing said chemicals out of said substrate by providing pure water onto a surface of said substrate,

wherein at least a part of said dissolving said polymer step is carried out while supplying pure oxygen to the closed space.

47. (new) The method as set forth in claim 46, wherein an oxygen concentration in said closed space is 10% or greater.

48. (new) The method as set forth in claim 5, wherein at least a part of said step (a) is carried out in oxidation atmosphere when a period of time in which said step (a) is carried out is longer than a period of time in which said step (b) is carried out.